



Water Quality unit
EPA Region VIII



Total Maximum Daily Load Program

Understanding the TMDL Process

High quality water is an extremely valuable commodity in the West. States decide how clean they want each stream or lake to be by establishing water quality standards. A total maximum daily load (TMDL) is a part of a plan to fix water quality problems. Each TMDL identifies the action needed to restore and protect our water. Therefore, a TMDL provides a valuable link between water quality standards and the management practices needed to improve our watershed.

What is a total maximum daily load (TMDL)?

A TMDL specifies the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and allocates pollutant loadings among point and nonpoint pollutant sources. Not all pollutant problems lend themselves to a "pounds-per-day" approach, so TMDLs can be expressed using surrogates related to pollutant loading....such as characteristics of riparian health, stream channel condition, aquatic habitat factors, and biological indicators.

The Need - the Quality of Our Nation's Waters

Over 40% of our assessed waters still do not meet the water quality standards states, territories, and authorized tribes have set for them. This amounts to over 20,000 individual river segments, lakes, and estuaries. These impaired waters include approximately 300,000 miles of rivers and shorelines and approximately 5 million acres of lakes --

Requirements of a TMDL Program Under section 303(d) of the Clean Water Act, states, territories, and authorized tribes are required to develop **lists of impaired waters**. These impaired waters do not meet water quality standards that states, territories, and authorized tribes have set for them, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDLs for these waters. The lists of impaired waters will be updated by all states no later than **October 2002**.

The TMDL Process Congress has charged states to develop total maximum daily loads (TMDLs) for priority watersheds. In order to effectively develop a TMDL process and set TMDLs for critical areas, it is important that private citizens and land owners, community groups, land management agencies, and local governments all understand TMDLs and the TMDL process. The process includes the following steps:

1. Identify the **sources and causes** of the pollutant problems
2. Identify the **water quality goal** (e.g., what are the water quality standards for the waterbody?)
3. Identify the **TMDL** by estimating the total amount of pollutant that can be allowed into the water and what needs to be done to achieve that amount.
4. Identify and implement the **best management practices**.





EPA's Role in the TMDL Process

The Clean Water Act requires EPA to review and either approve or disapprove **303(d) waterbody lists and TMDLs** submitted to it by the states. If it disapproves either a list or TMDL, it must develop a list or TMDL for the state. EPA also provides technical assistance to states and other stakeholders as well as developing technical guidance related to development of 303(d) waterbody lists and the development of TMDLs.

Litigation in the TMDL Program Lawsuits challenging the quality of state TMDL programs have become a key aspect of the TMDL program over the last 10 years. EPA is named a defendant in many of the lawsuits because plaintiffs believe EPA has a mandatory duty to step in and take over a state program if a state program is deficient in some manner. EPA, Region VIII has received lawsuits in Colorado, Montana, South Dakota, and Wyoming. To date, there have been about 40 legal actions in 38 states. EPA is under court order or consent decrees in many states to ensure that TMDLs are established, either by the state or by EPA. The main focus of the lawsuits have been on the quality of state 303(d) waterbody lists as well as on the quality and pace of TMDLs being developed.

Current Issues with the TMDL Program

The following are issues that are currently facing Region VIII:

- P** EPA is undergoing an effort to revise its regulations on the TMDL program;--a draft rule will be out for public comment in early fall and a final rule is anticipated in spring 2003
- P** Development of wet weather TMDLs that address stormwater pollution
- P** Defining approaches to develop watershed scale TMDLs
- P** EPA consultation with the US Fish and Wildlife Service on all TMDL approvals
- P** Meeting court-ordered deadlines for TMDL development in Montana
- P** Continued TMDL litigation (Wyoming, Montana)

TMDLs for Tribal Waters

Current rules do not require tribes to develop 303(d) waterbody lists or develop TMDLs for their waters. Tribes can seek authorization under the Clean Water Act to obtain TMDL authorities if they wish. In Region VIII, states and tribes have worked together on some TMDLs for transboundary waterbodies. More and more coordination is expected between states and tribes over the coming years as more watershed scale TMDLs are initiated by the States. Further, EPA has supported some tribal efforts to address water quality issues through the TMDL process.



For more information, contact Bruce Zander (Region VIII Coordinator) at 303-312-6846 or zander.bruce@epa.gov or write to Mr. Zander at:
U.S. EPA; Region VIII; Suite 300

999 18th Street, Suite 300, Denver, CO 80202

Also, see <http://www.epa.gov/region8/water/tmdl.html>